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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,644	03/23/2004	Gregory P. Hertrich	495812005200	3898

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MORRISON & FOERSTER LLP
755 PAGE MILL RD
PALO ALTO, CA 94304-1018

EXAMINER

KAYRISH, MATTHEW

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/807,644

Applicant(s)

HERTRICH, GREGORY P.

Examiner

Matthew G. Kayrish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 13-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-12 in the reply filed on 11/28/2006 is acknowledged. Claims 13-21 have been withdrawn from further consideration.

Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 7/28/2006, regarding claim 12 have been fully considered but they are not persuasive. Claim 12 states a holographic storage medium. Akiyama et al discloses an optical disk, which completely encompasses the sub-category known as holographic disks. Furthermore, the application and subject matter of claim 12 is more specifically drawn to the cartridge shutter, and even more specifically to the locking mechanisms used to lock the shutter. The type of disk within the cartridge has no effect on the operation of the lock for the shutter, therefore, need not be considered critical.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Akiyama et al (US Patent Number 5406547).

Regarding claim 12, Akiyama et al disclose everything repeated from claim 1, further disclosing:

A data storage cartridge, comprising:

A holographic storage medium (column 1, lines 11-13);

A housing (figure 1, item C) having at least one media access aperture (figure 2, item 9), the storage medium being provided within the housing such that at least one media access aperture exposes a surface of the storage medium (column 6, lines 20-24); and

A shutter assembly (figure 3, items 10 and 14) movable from a closed position to an open position (figures 1/2 display open/closed), said shutter assembly comprising:

A cover (figure 3, item 10) configured to cover at least one media access aperture when the shutter assembly is in the closed position (See figure 1) and to expose at least one media access aperture when the shutter assembly is in the open position (See figure 2); and

A lock assembly for locking the cover in the closed position (figure 22).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Takishima (US Publication Number 2004/0042383).

Regarding claim 1, Takishima disclose:

A data storage cartridge, comprising:

A storage medium (figure 3, item 19);

A housing (figure 3, item 11) having at least one media access aperture (figure 3, item 12a), the storage medium being provided within the housing such that at least one media access aperture exposes a surface of the storage medium (figure 3, media is exposed); and

A shutter assembly (figure 3, item 13) movable from a closed position to an open position (figures 1/2 display closed/open), said shutter assembly comprising:

A cover configured to cover at least one media access aperture when the shutter assembly is in the closed position (figure 1) and to expose at least one media access aperture when the shutter assembly is in the open position (figure 2); and

A shutter cam (figure 3, item 14) coupled to the cover (paragraph 67), said shutter cam including a lock assembly (figure 3, item 14a) and a cam portion (figure 2,

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item 13b), wherein the lock assembly and the cam portion move with the shutter assembly (paragraph 67, if the assembly is mounted to the shutter, then the assembly must move with the shutter).

Regarding claim 2, Takishima discloses:

The data storage cartridge of claim 1, wherein said storage medium comprises a rotatable disk-shaped storage medium (paragraph 60, disk-shaped media inherently rotate).

Regarding claim 3, Takishima discloses:

The data storage cartridge of claim 2, wherein at least one media access aperture exposes a radial region of the storage medium (figure 2).

Regarding claim 5, Takishima discloses:

The data storage cartridge of claim 1, wherein said storage medium comprises a holographic storage medium (abstract, holographic is a sub-category of optical).

Regarding claim 6, Takishima discloses:

The data storage cartridge of claim 1, wherein:

Said lock assembly comprises a lock actuator (figure 1, item 23) having a locked position (figure 1, item 23 isn't engaged in the notch) and an unlocked position (figure 2), such that when said lock actuator is in the locked position, the shutter assembly is inhibited from moving from the closed position to the open position (paragraph 69), and when said lock actuator is in the unlocked position, the shutter assembly is permitted to move from the closed position to the open position (paragraph 72).

Regarding claim 7, Takishima discloses:

The data storage cartridge of claim 6, wherein a direction of movement of the lock actuator from the locked position (figure 1) to the unlocked position (figure 2) is the same as a direction of movement of the shutter assembly from the closed position to the open position (figure 1 and figure 2 display the direction of movement of the shutter, accordingly, it can be seen that the actuator [23] moves with the shutter).

Regarding claim 11, Akiyama et al disclose:

The data storage cartridge of claim 1, wherein at least one media access aperture exposes a partial surface of the storage medium (figure 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takishima, in view of Akiyama et al (US Patent Number 5406547).

Regarding claim 4, Takishima fails to specifically disclose:

Wherein said housing comprises:

A first media access aperture on a top side of the housing exposing a top side of a first radial region of the storage medium; and

A second media access aperture on a bottom side of the housing exposing a bottom side of the first radial region of the storage medium.

Akiyama et al disclose:

Wherein said housing comprises:

A first media access aperture (figure 33, item 6 [Upper Shell] and aperture [9]) on a top side of the housing exposing a top side of a first radial region of the storage medium (column 1, lines 18-23); and

A second media access aperture (figure 34, item 7 [Lower Shell] and aperture [9]) on a bottom side of the housing exposing a bottom side of the first radial region of the storage medium (column 1, lines 18-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the cartridge of Takishima with a top window and a bottom window, as taught by Akiyama et al, because the disk then could be read from either a top head or a bottom head.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Takishima.

Regarding claim 1, Takishima disclose:

A data storage cartridge, comprising:

A storage medium (figure 3, item 19);

A housing (figure 3, item 11) having at least one media access aperture (figure 3, item 12a), the storage medium being provided within the housing such that at least one media access aperture exposes a surface of the storage medium (figure 3, media is exposed); and

A shutter assembly (figure 3, item 13) movable from a closed position to an open position (figures 1/2 display closed/open), said shutter assembly comprising:

A cover configured to cover at least one media access aperture when the shutter assembly is in the closed position (figure 1) and to expose at least one media access aperture when the shutter assembly is in the open position (figure 2); and

A shutter cam (figure 3, item 14) coupled to the cover (paragraph 67), said shutter cam including a lock assembly (figure 3, item 14a) and a cam portion (figure 2, item 13b), wherein the lock assembly and the cam portion move with the shutter assembly (paragraph 67, if the assembly is mounted to the shutter, then the assembly must move with the shutter).

Regarding claim 6, Takishima discloses:

The data storage cartridge of claim 1, wherein:

Said lock assembly comprises a lock actuator (figure 3, item 16) having a locked position (figure 3) and an unlocked position (figure 4), such that when said lock actuator is in the locked position, the shutter assembly is inhibited from moving from the closed position to the open position (paragraph 69), and when said lock actuator is in the unlocked position, the shutter assembly is permitted to move from the closed position to the open position (paragraph 72).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takishima, in view of Akiyama et al.

Regarding claim 8, Takishima fails to specifically disclose:

Wherein said lock actuator comprises a projection (figure 30, item 60) that protrudes from a lock actuator aperture (figure 23, item 19 has hole) when the lock actuator is in the locked position (column 10, lines 37-44) and is recessed from the lock actuator aperture when the lock actuator is in the unlocked position (column 10, lines 57-67).

Akiyama et al disclose:

Wherein said lock actuator comprises a projection (figure 30, item 60) that protrudes from a lock actuator aperture (figure 23, item 19 has hole) when the lock actuator is in the locked position (column 10, lines 37-44) and is recessed from the lock actuator aperture when the lock actuator is in the unlocked position (column 10, lines 57-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Takishima's cartridge with an exposed actuator, as taught by Akiyama et al, because this allows for an external member to physically press the actuator to unlock the shutter, as noted in column 10, lines 57-67.

Regarding claim 9, Takishima, in view of Akiyama et al disclose:

Said shutter cam defines a detent on a side of the housing (figure 3, item 13a);
and

Said lock actuator aperture is provided within the detent (figure 3, item 14b is directly behind the detent).

Regarding claim 10, Takishima fails to specifically disclose:

Said detent is defined by at least a back side and two opposing sides; and

Said lock actuator aperture is provided on one of the two opposing sides.

Akiyama et al disclose:

Said detent is defined by at least a back side (figure 24, item 53) and two opposing sides (figure 27, items 54 and 55); and

Said lock actuator aperture is provided on one of the two opposing sides (figure 24, dashed lines represent aperture).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

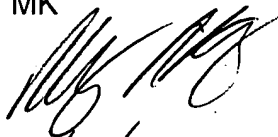

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew G. Kayrish

1/24/2007

MK


1/24/07
THANG V. TRAN
PRIMARY EXAMINER